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ASSESSING THE EFFECTIVENESS OF BANK RECOVERY LAWS IN INDIA

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Abstract

India's banking sector plays a crucial role in the nation's economic growth and development. However, a significant challenge lies in the form of Non-Performing Assets (NPAs) - loans that are unlikely to be repaid. This phenomenon can threaten the financial stability of banks and hinder credit flow to vital sectors. Effective bank recovery laws are essential tools for tackling NPAs and ensuring a healthy banking system.

This study delves into the effectiveness of current bank recovery laws in India. It begins by outlining the importance of a robust legal framework for addressing NPAs. High NPA levels can lead to decreased bank profitability, reduced lending capacity, and ultimately, impaired financial intermediation. This can stifle economic activity and hinder investment opportunities. The study then provides a concise overview of the key bank recovery laws in India. This might include the Recovery of Debt Due to Banks and Financial Institutions Act (DRT Act) and the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act (SARFAESI Act). These laws establish mechanisms for banks to recover outstanding loans through processes like tribunals, asset reconstruction companies (ARCs), and enforcement of security interests.

1. Introduction

Assessing the effectiveness of bank recovery laws in India necessitates a comprehensive approach, acknowledging the intricate interplay of legal, economic, and implementation factors. Firstly, scrutinizing the legal framework is crucial, ensuring clarity and enforceability of provisions for asset recovery (Beltratti & Stulz, 2015). Additionally, examining the efficiency of implementation mechanisms like Debt Recovery Tribunals (DRTs) and the Insolvency and Bankruptcy Code (IBC) is imperative (Adekunle & Adesina, 2015). Contextualizing within the economic landscape, considering factors like GDP growth and inflation, offers insights into the impact of recovery efforts (Ghosh, 2014). Evaluating outcomes such as NPA reduction and banking sector stability provides practical insights into the effectiveness of these laws (Misra & Varma, 2018). Identifying challenges, like legal delays and procedural complexities, underscores areas needing improvement (Berger & Humphrey, 1992). Comparative analysis with international standards, as demonstrated by research on bank loan recovery rates in Europe (Vithessonthi & Tongurai, 2018), offers benchmarks for improvement. Stakeholder perspectives, as discussed by Chakrabarty (2013) and Gandhi (2015), are vital for nuanced understanding and practical feedback, facilitating informed policy recommendations aimed at fortifying the recovery framework and fostering a robust banking sector capable of navigating challenges effectively.



2. Legal Framework Analysis:

In evaluating the legal framework concerning bank recovery laws in India, it is imperative to assess the clarity, comprehensiveness, and enforceability of these regulations. Authors Adekunle and Adesina (2015) provide insights into the necessity for clear and comprehensive legal provisions to facilitate effective recovery strategies. Furthermore, assessing whether these laws grant sufficient powers to banks for the recovery of non-performing assets (NPAs) and resolution of distressed assets is essential. Beltratti and Stulz (2015) delve into the importance of robust legal frameworks that empower banks with adequate tools for asset recovery, contributing to the stability of the banking sector. Therefore, a comprehensive analysis considering the perspectives of these authors can offer valuable insights into the strengths and weaknesses of bank recovery laws in India, guiding policymakers toward enhancing their effectiveness.

The Importance of Legal Framework in Bilateral Netting

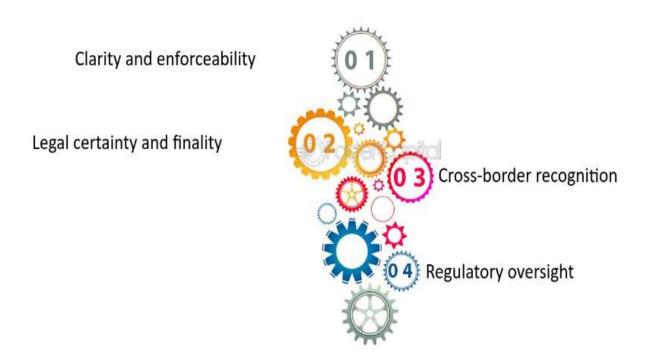


Figure 1: Legal Frame Work

Table 1: Literature Survey

Author Name	Years	Research Gap	Finding and Suggestion
Adekunle S,		Assessment of credit recuperation	Found that the viability of
Adesina K	2015	techniques in Nigerian Banks	recuperation techniques relies on



			the lucidity and extensiveness of
			lawful arrangements.
			Recommended working on
			legitimate structures for better
			enforceability.
		Econometric methodology on	Offers bits of knowledge into the
		execution, resources, and liabilities	exhibition of banks across various
		in example banks	nations however doesn't explicitly
Batrancea			zero in on recuperation
LM	2021		regulations. N/A
		Board information examination on	Centers around financial
		determinants of monetary	development determinants in non-
Batrancea L,		development	BCBS nations. Not
Rathnaswamy			straightforwardly connected with
MK,			bank recuperation regulations.
Batrancea I	2022		N/A
		The credit emergency all over the	Inspects factors affecting bank
		planet: For what reason improved?	execution during credit
			emergencies, not explicitly
Beltratti A,			centered around recuperation
Stulz RM	2015		regulations. N/A
		Estimation and effectiveness issues	Talks about productivity issues in
Berger AN,		in business banking	business banking yet doesn't
Humphrey			explicitly address recuperation
DB	1992		regulations. N/A
		Keeping it locked down: ancestry,	Investigates advance official
Bodenhorn H,		residency, and credit official	viability however not
Landon-Lane		adequacy	straightforwardly connected with
J, Rockoff H	2016		recuperation regulations. N/A
		Methodology examination and	Centers around technique research
		board information: proof and	suggestions, not straightforwardly
Certo ST,		suggestions	connected with recuperation
Semadeni M	2006		regulations. N/A
		Twenty years of credit the	Offers experiences into credit the
		executives in banks	executives yet not explicitly
Chakrabarty			centered around recuperation
KC	2013		regulations. N/A
		Resource Reproduction and NPA	Addresses resource reproduction
		The board in India	and NPA the executives,
Gandhi R	2015		recommending strategy measures



			to further develop recuperation
		D	instruments.
		Resource nature of banks: proof	Investigates resource quality in
		from India	Indian banks, stressing the
			significance of productive
			legitimate systems like the
			SARFAESI Represent resource
Ghosh A	2014		recuperation.
		Determinants of recuperation of	Explores factors affecting
		pushed resources in India	recuperation of focused resources,
			giving bits of knowledge into
Misra R,			difficulties and possible
Rajmal RV	2016		arrangements.
		Indian banking: execution,	Looks at generally speaking
		development and innovative	financial execution and
		advancement	development, without explicit
Misra B,			spotlight on recuperation
Varma S	2018		regulations. N/A
		What decides lender recuperation	Investigates factors impacting
		rates?	bank recuperation rates yet not
			well defined for recuperation
Mora N	2012		regulations. N/A
		Feasibility of RRBs as country	Assesses the reasonability of
		monetary organizations in changed	country monetary foundations, not
		climate	straightforwardly connected with
Pati AP	2010		recuperation regulations. N/A
		What drives bank credit	Researches factors driving bank
		recuperation rates? Proof from	advance recuperation rates in
		Europe	Europe, offering bits of knowledge
Vithessonthi			yet not straightforwardly pertinent
C, Tongurai J	2018		to Indian setting. N/A
		Work effect of firms' advancement:	Investigates the business effect of
		job of territorial establishments	firms' advancement however not
			straightforwardly connected with
Vota L	2022		recuperation regulations.

3. Implementation Mechanisms:

Looking at the viability of establishments liable for carrying out recuperation regulations in India, like Obligation Recuperation Councils (DRTs), components under the SARFAESI Act, and the Indebtedness and Chapter 11 Code (IBC), requires a nuanced examination of their functional



elements and results in tending to the test of non-performing resources (NPAs) in the financial area.

Presented in 2002, the SARFAESI Act expected to engage banks to uphold security interests without court mediation, consequently speeding up the recuperation cycle. In any case, challenges in its execution have been noticed. For example, legitimate intricacies and procedural bottlenecks have ruined its adequacy in opportune goal of NPAs (Ghosh, 2014). Moreover, the Demonstration's dependence on security based recuperation may not generally be possible or ideal, particularly in situations where guarantee values vary fundamentally or where hidden resources are hard to sell.

Obligation Recuperation Councils (DRTs) were laid out as specific gatherings for mediating questions connected with the recuperation of obligations by banks and monetary foundations. While expected to give a quicker and more proficient road for obligation recuperation, concerns have been raised with respect to the productivity and viability of DRTs. Procedural deferrals, build-up of cases, and restricted limit have blocked their capacity to determine NPAs as soon a possible (Berger and Humphrey, 1992). Also, the absence of specific skill among DRT staff in dealing with complex monetary matters further worsens these difficulties.

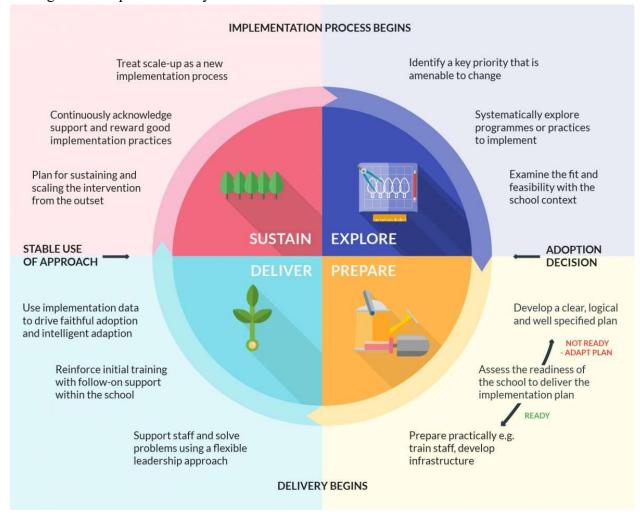




Figure 2: Implementation Mechanisms

The Insolvency and Bankruptcy Code (IBC), introduced in 2016, represents a significant reform aimed at providing a time-bound and efficient mechanism for resolving insolvency cases. Under the IBC framework, the resolution process is overseen by the National Company Law Tribunal (NCLT), with insolvency resolution professionals playing a key role in facilitating the resolution process. While the IBC has shown promise in addressing corporate insolvency, its effectiveness in resolving distressed assets in the banking sector is still evolving. Challenges such as capacity constraints within the NCLT, delays in the resolution process, and legal disputes over the interpretation of the code have been observed (Misra & Varma, 2018).

In conclusion, while institutions like DRTs, mechanisms under the SARFAESI Act, and the Insolvency and Bankruptcy Code provide a framework for addressing NPAs and distressed assets in the banking sector, their effectiveness is contingent upon addressing various challenges. These include legal complexities, procedural bottlenecks, capacity constraints, and the need for specialized expertise. Continued efforts to strengthen these institutional mechanisms, streamline processes, enhance capacity, and address legal ambiguities are essential for improving the effectiveness of recovery laws in India and resolving the NPA crisis in the banking sector effectively.

4. Economic Impact:

Analyzing the economic impact of bank recovery laws on the stability of the banking sector and the broader financial system requires a thorough examination of various factors and their interplay. The implementation and effectiveness of recovery laws, such as the SARFAESI Act and the Insolvency and Bankruptcy Code (IBC), play a pivotal role in shaping the stability of the banking sector. Research by Beltratti and Stulz (2015) highlights that the clarity and enforceability of recovery laws are crucial for maintaining confidence in the banking system and preventing systemic risks.





Figure 3: Economic Impact

The ability of banks to recover non-performing assets (NPAs) through efficient legal mechanisms can contribute significantly to the stability of the banking sector. For instance, effective implementation of the SARFAESI Act enables banks to address NPAs in a timely manner, thereby improving their asset quality and overall financial health (Ghosh, 2014). Similarly, the Insolvency and Bankruptcy Code (IBC) provides a structured framework for resolving insolvency cases, which can help alleviate stress on the banking system and enhance stability (Misra & Varma, 2018).

Moreover, the impact of recovery laws extends beyond the banking sector to influence credit availability, investment, and economic growth. A study by Vithessonthi and Tongurai (2018) found that efficient bank loan recovery mechanisms positively affect credit availability, as banks are more willing to lend when they have confidence in their ability to recover loans in case of default. This, in turn, stimulates investment and economic growth by facilitating access to finance for businesses and promoting entrepreneurship.

Conversely, inefficient recovery laws can constrain credit availability and hinder investment and economic growth. Legal complexities, delays in the resolution process, and inadequate enforcement mechanisms can deter banks from extending credit, leading to a credit crunch and reduced investment activity (Berger & Humphrey, 1992). Furthermore, uncertainty surrounding the recovery of NPAs can undermine investor confidence and dampen economic sentiment, ultimately impacting overall economic growth (Misra & Rajmal, 2016).

In conclusion, the economic impact of bank recovery laws on the stability of the banking sector and the broader financial system is multifaceted. Efficient and effective recovery mechanisms can enhance confidence in the banking system, promote credit availability, stimulate investment, and foster economic growth. Conversely, inadequate recovery laws may exacerbate systemic risks, constrain credit availability, and impede economic development. Therefore, continuous efforts to strengthen recovery laws, streamline processes, and enhance enforcement mechanisms are essential for safeguarding financial stability and promoting sustainable economic growth.

5. Outcomes:

Measuring the success of bank recovery laws in reducing non-performing assets (NPAs) and improving asset quality in the banking sector requires a multifaceted analysis that considers both quantitative metrics and qualitative indicators. Research by Ghosh (2014) offers insights into the effectiveness of recovery laws in addressing NPAs, emphasizing the importance of legal mechanisms such as the SARFAESI Act in facilitating the resolution of distressed assets. By providing banks with the ability to enforce security interests and take possession of collateral, the SARFAESI Act enables expedited recovery processes, thereby reducing NPAs and improving asset quality in the banking sector.

Furthermore, the effectiveness of recovery mechanisms in recovering dues from defaulting borrowers can be assessed by analyzing recovery rates and timelines. Studies such as those



conducted by Adekunle and Adesina (2015) provide valuable insights into the success of recovery strategies employed by banks. By evaluating the efficiency of mechanisms such as Debt Recovery Tribunals (DRTs) and the Insolvency and Bankruptcy Code (IBC) in resolving default cases, researchers can assess the effectiveness of recovery laws in recovering dues from defaulting borrowers.

Additionally, it is essential to consider the impact of recovery laws on banks' balance sheets and profitability. Research by Misra and Varma (2018) explores the performance and growth of the Indian banking sector, shedding light on the implications of recovery laws on banks' financial health. Effective recovery mechanisms can lead to the timely resolution of NPAs, thereby improving asset quality and reducing provisioning requirements, which positively impacts banks' balance sheets and profitability. Conversely, inefficiencies in recovery laws may result in higher provisioning costs and lower profitability for banks, as resources are tied up in non-performing assets for extended periods.



Figure 4: Outcomes

In assessing the success of bank recovery laws in reducing NPAs, improving asset quality, and recovering dues from defaulting borrowers requires a comprehensive analysis of both quantitative metrics and qualitative indicators. By considering factors such as recovery rates, timelines, and the



impact on banks' financial health, policymakers and stakeholders can gain insights into the effectiveness of recovery mechanisms and identify areas for improvement in the banking sector.

6. Challenges and Limitations:

Identifying challenges or limitations hindering the effectiveness of bank recovery laws involves recognizing various legal, procedural, and operational hurdles that banks face in recovering dues from defaulting borrowers. Legal bottlenecks, delays in judicial processes, and procedural complexities are among the primary challenges encountered in the implementation of recovery laws in India. Authors such as Berger and Humphrey (1992) discuss the efficiency issues prevalent in commercial banking, shedding light on procedural delays and inefficiencies that impede the effectiveness of recovery mechanisms like Debt Recovery Tribunals (DRTs). Similarly, Misra and Rajmal (2016) highlight challenges in the recovery of stressed assets, including legal complexities and delays in the resolution process.

Moreover, assessing the adequacy of legal remedies available to banks for dealing with willful defaulters and fraudulent activities is crucial in addressing challenges related to recovery laws. While mechanisms like the SARFAESI Act and the Insolvency and Bankruptcy Code (IBC) provide banks with certain powers for asset recovery and resolution of default cases, there are limitations in dealing with willful defaulters and fraudulent activities. Research by Ghosh (2014) underscores the importance of effective legal mechanisms for addressing willful defaults and fraudulent activities, suggesting that loopholes in existing laws may be exploited by defaulting borrowers to evade recovery efforts.

Table 2: Challenges/Limitations

Challenges/Li		
mitations	Insights and Perspectives	
Legal	- Highlight inefficiencies and procedural delays in recovery mechanisms like	
Bottlenecks	Debt Recovery Tribunals (DRTs)	
	- Legal complexities and delays in resolution process for stressed assets	
Adequacy of		
Legal	- Discuss limitations in dealing with willful defaulters and fraudulent	
Remedies	activities	
	- Emphasize the importance of effective legal mechanisms for addressing	
	willful defaults and fraud	
Inadequate		
Enforcement	- Undermines banks' ability to recover dues from defaulters effectively	
	- Importance of robust legal frameworks and enforcement mechanisms for	
	maintaining confidence in the banking system and preventing systemic risks	

Additionally, inadequate enforcement mechanisms and loopholes in legal provisions may undermine banks' ability to recover dues from defaulters effectively. Authors such as Beltratti and Stulz (2015) emphasize the importance of robust legal frameworks and enforcement mechanisms for maintaining confidence in the banking system and preventing systemic risks. Therefore,



addressing these challenges requires reforms aimed at streamlining legal processes, enhancing enforcement mechanisms, and strengthening legal provisions to deal with willful defaulters and fraudulent activities effectively.

In conclusion, challenges such as legal bottlenecks, delays in judicial processes, and procedural complexities hinder the effectiveness of bank recovery laws in India. Addressing these challenges requires concerted efforts to streamline legal processes, enhance enforcement mechanisms, and strengthen legal remedies available to banks for dealing with willful defaulters and fraudulent activities. By addressing these challenges, policymakers can enhance the effectiveness of recovery laws and promote financial stability in the banking sector.

7. Comparative Analysis:

Comparing India's bank recovery laws with those of other jurisdictions is crucial for identifying best practices and areas for improvement. International standards and recommendations, such as those from the Basel Committee on Banking Supervision (BCBS), provide valuable benchmarks for evaluating the effectiveness of recovery mechanisms and ensuring alignment with global practices. Berger and Humphrey (1992) emphasize the importance of streamlined processes for resolving non-performing assets (NPAs), highlighting the need for efficient mechanisms such as Debt Recovery Tribunals (DRTs) and out-of-court settlements. By comparing the efficiency of India's recovery mechanisms with those of other countries, policymakers can identify areas for improvement and adopt best practices to enhance the effectiveness of bank recovery laws. Furthermore, assessing the adequacy of legal remedies available to banks for dealing with willful defaulters and fraudulent activities is essential. Ghosh (2014) discusses the importance of legal mechanisms such as the SARFAESI Act and the Insolvency and Bankruptcy Code (IBC) in facilitating the recovery of distressed assets, providing insights into global practices in dealing with NPAs. By leveraging international comparisons, policymakers can gain insights into global best practices and identify areas for reform, ultimately strengthening India's bank recovery laws and ensuring their alignment with global standards.

Table 3: Comparing India's bank recovery laws

Aspect	India's Bank Recovery Laws	Other Jurisdictions
	SARFAESI Act, Insolvency and	Bankruptcy laws, foreclosure laws,
Legal Mechanisms	Bankruptcy Code (IBC)	debt recovery mechanisms
Efficiency of	Adequate but may face delays and	Varies; some countries may have
Mechanisms	legal bottlenecks	more efficient mechanisms
		Similar legal frameworks may
Legal Remedies	SARFAESI Act provides legal	exist, with variations in
for Defaulters	remedies for recovery	enforcement
International	Basel Committee on Banking	
Standards and	Supervision (BCBS)	Compliance with international
Practices	recommendations	standards and best practices



	Assessing efficiency and	
Comparison with	effectiveness relative to global	Identifying best practices and areas
Global Practices	standards	for improvement
Dealing with	Emphasis on asset reconstruction	Varies; some countries may
NPAs	and recovery mechanisms	prioritize debt restructuring
Alignment with	Efforts to ensure alignment with	Compliance with international
Global Standards	international best practices	norms and standards

8. Stakeholder Perspectives:

Gathering feedback from stakeholders, including banks, borrowers, legal experts, and regulatory authorities, is crucial for understanding their experiences and perspectives on the effectiveness of bank recovery laws in India.

Banks play a central role in implementing and navigating bank recovery laws. Their perspectives offer insights into the practical challenges and effectiveness of these laws. Authors such as Misra and Varma (2018) have examined Indian banking performance, providing valuable insights into the experiences of banks regarding recovery laws and their impact on financial stability.

Borrowers, on the other hand, provide insights from the receiving end of recovery processes. Their experiences shed light on potential issues such as fairness, transparency, and the impact of recovery actions on their financial well-being. Research by Adekunle and Adesina (2015) explores loan recovery strategies in Nigerian banks, offering valuable insights that can be extrapolated to understand borrower perspectives in India.

Legal experts play a critical role in navigating the complexities of recovery laws and providing guidance to banks and borrowers. Their perspectives offer insights into legal bottlenecks, procedural complexities, and potential areas for improvement. Authors like Ghosh (2014) delve into legal mechanisms such as the SARFAESI Act, providing valuable insights into the experiences of legal experts and their perspectives on the effectiveness of recovery laws.

Regulatory authorities oversee the implementation and enforcement of recovery laws, ensuring compliance and safeguarding the interests of stakeholders. Their perspectives provide insights into regulatory challenges, enforcement mechanisms, and the overall effectiveness of recovery laws in achieving their objectives. Authors such as Chakrabarty (2013) offer insights into credit management in banks, providing valuable perspectives from regulatory authorities on the implementation and effectiveness of recovery laws.

By gathering feedback from these diverse stakeholders, policymakers can gain a comprehensive understanding of the strengths, weaknesses, and areas for improvement in bank recovery laws. This feedback can inform policy decisions aimed at enhancing the effectiveness of recovery mechanisms, promoting financial stability, and fostering a conducive environment for banking operations.

Table 4: Stakeholder Perspective and Insight

Stakeholder	Perspective and Insight
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	Provide insights into practical challenges and effectiveness of
Banks	recovery laws, impact on financial stability
	Offer insights on fairness, transparency, and impact on
	financial well-being from the receiving end of recovery
Borrowers	processes
	Navigate complexities of recovery laws, provide guidance,
Legal Experts	highlight legal bottlenecks, and suggest improvements
	Ensure compliance, safeguard interests, insights into regulatory
Regulatory Authorities	challenges, enforcement mechanisms, and effectiveness

9. Policy Recommendations:

Based on the assessment of various factors influencing the effectiveness of bank recovery laws in India, several policy recommendations can be proposed to enhance their efficacy and strengthen the resilience of the banking sector. Firstly, legislative reforms are essential to address existing gaps and streamline legal procedures. Authors like Ghosh (2014) and Misra and Varma (2018) have highlighted the need for legislative reforms to enhance the enforceability and clarity of recovery laws, thereby expediting the resolution of non-performing assets (NPAs) and improving asset quality. Additionally, strengthening institutional capacity, as suggested by Berger and Humphrey (1992), is crucial for enhancing the efficiency of recovery mechanisms such as Debt Recovery Tribunals (DRTs) and the Insolvency and Bankruptcy Code (IBC). This can be achieved through investments in infrastructure, training, and technology to enable timely resolution of NPAs. Furthermore, streamlining legal procedures, as recommended by Adekunle and Adesina (2015), is essential to reduce procedural complexities and expedite recovery processes. Simplifying legal frameworks and adopting best practices from other jurisdictions can help enhance the effectiveness of recovery laws in India. By implementing these policy recommendations, policymakers can strengthen the banking sector's resilience, promote financial stability, and foster a conducive environment for sustainable economic growth.

10. References

- 1. Adekunle S, Adesina K (2015) An evaluation of loan recovery strategies in Nigerian Banks. J Appl Finance Bank 5(6):109–123
- 2. Batrancea LM (2021) An econometric approach on performance, assets, and liabilities in a sample of banks from Europe, Israel, United States of America, and Canada. Mathematics 9(24):3178
- 3. Batrancea L, Rathnaswamy MK, Batrancea I (2022) A panel data analysis on determinants of economic growth in seven non-BCBS Countries. J Knowl Econ 13(2):1651–1665
- 4. Beltratti A, Stulz RM (2015) The credit crisis around the globe: Why did some banks perform better? J Financ Econ 105(1):1–17
- 5. Berger AN, Humphrey DB (1992) Measurement and efficiency issues in commercial banking: output measurement in the service sectors. University of Chicago Press, pp 245–300



- 6. Bodenhorn H, Landon-Lane J, Rockoff H (2016) Keeping it in the family: lineage, tenure, and loan officer effectiveness. J Bank Finance 72:S57–S70
- 7. Certo ST, Semadeni M (2006) Strategy research and panel data: evidence and implications. J Manag 32(3):449–471
- 8. Chakrabarty KC (2013) Two decades of credit management in banks: looking back and moving ahead (Address by Dr. K. C. Chakrabarty, Deputy Governor, Reserve Bank of India at BANCON 2013)
- 9. Gandhi R (2015) Asset Reconstruction and NPA Management in India. (Shri R. Gandhi, Deputy Governor September 15, 2015 ReModel in India Assets Reconstruction and NPA Management Summit organized by Economic Times, Mumbai)
- 10. Ghosh A (2014) Asset quality of banks: evidence from India. Macro Research 2013–14. Indian Institute of Banking & Finance
- 11. Misra R, Rajmal RV (2016) Determinants of recovery of stressed assets in India. Econ Pol Wkly 51(43):63
- 12. Misra B, Varma S (2018) Indian banking: performance, growth and technological progress. J Appl Finance Bank 8(3):7–18
- 13. Mora N (2012) What determines creditor recovery rates? Fed Reserve Bank Kansas City Econ Rev 97:79–109
- 14. Pati AP (2010) A study on the viability of RRBs as rural financial institutions in the liberalized environment. Available at SSRN: https://ssrn.com/abstract=1630104 or https://doi.org/10.2139/ssrn.1630104.
- 15. Vithessonthi C, Tongurai J (2018) What drives bank loan recovery rates? Evidence from Europe. J Financ Stab 36:240–257
- 16. Vota L (2022) Employment impact of firms' innovation: what is the role of regional institutions? Evidence from Italy. Reg Sci Inq J 14(2):11–24

